110TH CONGRESS 1ST SESSION

S. 1246

To establish and maintain a wildlife global animal information network for surveillance internationally to combat the growing threat of emerging diseases that involve wild animals, such as bird flu, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 26, 2007

Mr. Lieberman (for himself, Mr. Brownback, and Mr. Akaka) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

A BILL

To establish and maintain a wildlife global animal information network for surveillance internationally to combat the growing threat of emerging diseases that involve wild animals, such as bird flu, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Wildlife Global Animal
- 5 Information Network for Surveillance Act" or "Wildlife
- 6 GAINS Act".

1 SEC. 2. FINDINGS.

| | SEC. 2. FINDINGS. |
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| 2 | Congress finds that— |
| 3 | (1) the ongoing panzootic of highly pathogenic |
| 4 | avian influenza (HPAI) strain H5N1 in Asia and |
| 5 | Eurasia is a threat to global human health and the |
| 6 | global poultry industry; |
| 7 | (2) the HPAI virus is capable of causing mas- |
| 8 | sive avian die-offs, and response can easily involve |
| 9 | the culling of tens of millions of domestic poultry or |
| 10 | domestic waterfowl, resulting in significant economic |
| 11 | losses; |
| 12 | (3) the fatality rate due to infection in humans |
| 13 | may be 30 to 50 percent or more; |
| 14 | (4) it has long been known that wild birds are |
| 15 | a reservoir host for avian influenza viruses world- |
| 16 | wide; |
| 17 | (5) the 1918 pandemic, the most lethal of the |
| 18 | three pandemics that killed over 40,000,000 people |
| 19 | worldwide, was caused by an influenza virus that ini- |
| 20 | tially jumped directly from birds to humans and sub- |
| 21 | sequently evolved an ability to transmit from |
| 22 | human-to-human; |
| 23 | (6) this precedent for an avian influenza virus |
| 24 | to transmit directly from birds to humans, there |
| 25 | spread among humans, significantly raises the con- |

cern about the current H5N1 influenza strain;

- 1 (7) increased surveillance, including on migra-2 tory birds, is critical to controlling avian influenza 3 and preparing for other potential emerging infec-4 tious diseases;
 - (8) the capacity to proactively detect the threats could result in significantly improved disease prediction and prevention capabilities;
 - (9) international wildlife health surveillance does not clearly fall under the jurisdiction of any Federal or international agency;
 - (10) there is a continued inability to share realtime data across the human, agricultural, wildlife, and veterinary agencies on zoonotic threats;
 - (11) while surveillance at domestic poultry and domestic waterfowl production facilities and farms is an immediate and on-going monitoring need and is being supported through relevant agencies, surveillance in wild bird populations that may have been exposed to the virus is a critical component to determine the spread of the virus, implement control measures, and protect human, livestock, and wildlife health;
 - (12) monitoring and surveillance of wild migratory and resident water birds are critically important to identifying all strains of influenza viruses in wild

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- birds as a library of possible genotypes, determining
 their role in the spread of the virus, and anticipating
 where outbreaks may occur to enhance preparedness;
 - (13) improving surveillance of wildlife health around the world would close significant jurisdictional and scientific gaps in current emerging infectious disease preparedness;
 - (14) other emerging diseases beyond bird flu merit similar attention, in terms of the potential threats to global public health as well as agribiosecurity and biodiversity;
 - (15) the majority of emerging infectious diseases identified in the past several decades have moved from wildlife to humans, largely due to human incursions into or alterations of wildlife habitats and hunting, consumption, and trade of wildlife species;
 - (16) the human immunodeficiency virus (HIV) virus moved from chimpanzees to humans via these mechanisms;
 - (17) many factors contribute to disease emergence and spread from wildlife to domestic animals and humans, including environmental degradation and the handling, consumption, and trade of wildlife and wildlife-derived products;

- 1 (18) from avian influenza to the severe acute 2 respiratory syndrome (SARS), from bovine tuber-3 culosis to the Ebola virus, and from HIV/AIDS to 4 monkey pox, a long list of zoonotic diseases nega-5 tively impacts people's lives and livelihoods and costs 6 the global economy billions of dollars; and
- 7 (19) the Government of the United States lacks 8 a comprehensive program to monitor wildlife health 9 around the world, a program that could proactively 10 inform preparedness not just in the case of a poten-11 tial H5N1 influenza strain pandemic, but also for a 12 broader array of emerging infectious disease threats 13 that often arise at the interface between wildlife, hu-14 mans, and their domestic animals.

15 SEC. 3. PURPOSES.

- The purposes of this Act are to establish and maintain a Wildlife Global Animal Information Network for
- 18 Surveillance—
- 19 (1) to more rapidly and efficiently detect, 20 verify, and report on the presence of infectious dis-21 eases, such as highly pathogenic avian influenza, in 22 birds and other wildlife around the world;
- 23 (2) to use information on pathogens found dur-24 ing surveillance of wildlife to better delineate poten-

| 1 | tial threats to domestic animals, humans, as well as |
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| 2 | wildlife itself; |
| 3 | (3) to use information on when and where |
| 4 | HPAI and other pathogens of concern are identified |
| 5 | in wildlife— |
| 6 | (A) to better guide preparedness in the |
| 7 | United States and around the world; and |
| 8 | (B) to carry out a strategic wildlife health |
| 9 | surveillance initiative that will provide regions. |
| 10 | countries, and specific locations with early |
| 11 | warning information that will help target re- |
| 12 | sources toward enhancement of agribiosecurity |
| 13 | surveillance, public health vigilance, and related |
| 14 | areas; |
| 15 | (4) to create an open access database within |
| 16 | which information on HPAI and other pathogens of |
| 17 | interest identified in wild birds and other wildlife |
| 18 | can be shared as close to real time as possible; |
| 19 | (5) to protect the health and safety of United |
| 20 | States citizens and officials traveling or living |
| 21 | abroad; and |
| 22 | (6) to protect the economic interests of the |
| 23 | United States and its partners from threats to |
| 24 | health, agriculture, and natural resources, including |

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wildlife itself.

1 SEC. 4. DEFINITIONS.

| 2 | In this Act: |
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| 3 | (1) Administrator.—The term "Adminis- |
| 4 | trator" means the Administrator of the United |
| 5 | States Agency for International Development, acting |
| 6 | through one or more eligible organizations. |
| 7 | (2) Eligible organization.—The term "eligi- |
| 8 | ble organization" means an organization chartered |
| 9 | in the United States with— |
| 10 | (A) extensive global wildlife health experi- |
| 11 | ence in tracking disease in wild birds and other |
| 12 | wildlife, including free-ranging, captive, and |
| 13 | wild bird species; |
| 14 | (B) proven ability in identifying avian in- |
| 15 | fluenza, Ebola virus, and other pathogens in |
| 16 | wild birds or other wildlife; |
| 17 | (C) experience managing and implementing |
| 18 | similar wildlife surveillance activities; and |
| 19 | (D) accredited zoological facilities in the |
| 20 | United States. |
| 21 | (3) HPAI.—The term "HPAI" means highly |
| 22 | pathogenic avian influenza. |
| 23 | (4) WILDLIFE GAINS.—The term "Wildlife |
| 24 | GAINS" means the Wildlife Global Animal Informa- |
| 25 | tion Network for Surveillance established under sec- |
| 26 | tion $5(a)$. |

| 1 | (5) WILDLIFE GAINS PARTNERS.—The term |
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| 2 | "Wildlife GAINS partners" means the partners of |
| 3 | the Wildlife GAINS described in section 5(b). |
| 4 | SEC. 5. WILDLIFE GLOBAL ANIMAL INFORMATION NET- |
| 5 | WORK FOR SURVEILLANCE. |
| 6 | (a) Authorization of Assistance.—The Adminis- |
| 7 | trator, acting through one or more eligible organizations, |
| 8 | is authorized to establish and maintain a program to im- |
| 9 | plement a Wildlife Global Animal Information Network for |
| 10 | Surveillance. |
| 11 | (b) Partners.—In administering the Wildlife |
| 12 | GAINS, the Administrator shall collaborate with appro- |
| 13 | priate— |
| 14 | (1) Federal and State agency partners, includ- |
| 15 | ing— |
| 16 | (A) the Department of Agriculture, acting |
| 17 | through— |
| 18 | (i) the Agricultural Research Service; |
| 19 | and |
| 20 | (ii) the Animal and Plant Health In- |
| 21 | spection Service; |
| 22 | (B) the Department of Health and Human |
| 23 | Services, acting through the Centers for Dis- |
| 24 | ease Control and Prevention; |
| 25 | (C) the Department of Homeland Security: |

| 1 | (D) the Department of Defense; |
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| 2 | (E) the Department of the Interior, acting |
| 3 | through— |
| 4 | (i) the United States Geological Sur- |
| 5 | vey; and |
| 6 | (ii) the United States Fish and Wild- |
| 7 | life Service; and |
| 8 | (F) various State wildlife agencies in the |
| 9 | United States; |
| 10 | (2) multilateral agency partners, including— |
| 11 | (A) the Food and Agriculture Organiza- |
| 12 | tion; |
| 13 | (B) the World Health Organization; |
| 14 | (C) the Office International des Epizooties, |
| 15 | the world animal health organization; and |
| 16 | (D) the World Conservation Union; |
| 17 | (3) conservation organizations with expertise in |
| 18 | international and domestic wildlife monitoring and |
| 19 | surveillance; |
| 20 | (4) accredited colleges of veterinary medicine |
| 21 | and medicine; and |
| 22 | (5) other national and international partners, |
| 23 | as necessary. |
| 24 | (c) International Surveillance.—The Adminis- |
| 25 | trator shall manage an international surveillance program |

| 1 | under which Federal Wildlife GAINS partners shall, and |
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| 2 | non-Federal Wildlife GAINS partners are encouraged |
| 3 | to— |
| 4 | (1) monitor and test for the presence or arrival |
| 5 | of avian influenza and other significant avian patho- |
| 6 | gens at important bird areas around the world and |
| 7 | in marketplaces with intense trade in wild birds; |
| 8 | (2) monitor and test for the presence or arrival |
| 9 | of other significant pathogens in free-ranging wild- |
| 10 | life and in places with intense trade in wild animals; |
| 11 | (3) use trained professionals to collect samples |
| 12 | and other data and send samples to appropriate di- |
| 13 | agnostic centers; |
| 14 | (4) use the Wildlife GAINS, in partnership with |
| 15 | relevant agencies and organizations, for con- |
| 16 | ducting— |
| 17 | (A) disease surveillance activities on migra- |
| 18 | tory birds and other wildlife worldwide; |
| 19 | (B) domestic and international field inves- |
| 20 | tigations on migratory birds and other wildlife; |
| 21 | (C) training and capacity-building activi- |
| 22 | ties related to the relationships between human |
| 23 | health, domestic animal health, and wildlife |
| 24 | health; and |

| 1 | (D) research on methods and approaches |
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| 2 | for detection and enhanced surveillance of |
| 3 | HPAI and other pathogens in migratory birds |
| 4 | and other wildlife; and |
| 5 | (5) send samples for pathogen identification |
| 6 | and testing to certified laboratories that— |
| 7 | (A) meet internationally established meth- |
| 8 | ods standards; |
| 9 | (B) are located at— |
| 10 | (i) the Centers for Disease Control |
| 11 | and Prevention; |
| 12 | (ii) the Office International des |
| 13 | Epizooties, the world animal health organi- |
| 14 | zation; |
| 15 | (iii) the Food and Agriculture Organi- |
| 16 | zation; |
| 17 | (iv) National Veterinary Services Lab- |
| 18 | oratories of the Department of Agriculture |
| 19 | (v) the Agricultural Research Services |
| 20 | or |
| 21 | (vi) other relevant specialized labora- |
| 22 | tories; and |
| 23 | (C) report the findings back to the Admin- |
| 24 | istrator and Wildlife GAINS partners. |
| 25 | (d) Network.— |

| 1 | (1) Partners.—The Administrator shall re- |
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| 2 | quire Federal Wildlife GAINS partners, and encour- |
| 3 | age non-Federal Wildlife GAINS partners, to trans- |
| 4 | mit to the Administrator information related to glob- |
| 5 | al distribution and characteristics of significant |
| 6 | pathogens. |
| 7 | (2) Administration.—The Administrator |
| 8 | shall— |
| 9 | (A) use surveillance reports and other for- |
| 10 | mal and informal sources of information to |
| 11 | identify and investigate local disease outbreaks |
| 12 | of avian influenza and other infectious diseases |
| 13 | involving wildlife, in coordination with Wildlife |
| 14 | GAINS partners; |
| 15 | (B) develop a long-term baseline of re- |
| 16 | gional data related to HPAI and pathogens in |
| 17 | migratory birds and other wildlife for analysis |
| 18 | between and across sites to create a system to |
| 19 | identify when and where outbreaks might occur |
| 20 | and paths of dispersal; |
| 21 | (C) provide technical assistance for disease |
| 22 | prevention and control programs based on sci- |
| 23 | entific understanding of the relationships be- |
| 24 | tween wildlife health, domestic animal health, |

and human health;

| 1 | (D) provide analytical disease findings reg- |
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| 2 | ularly to the United States Agency for Inter- |
| 3 | national Development and other Federal Wild- |
| 4 | life GAINS partners to prevent or combat |
| 5 | human and animal diseases; |
| 6 | (E) conduct other activities as are nec- |
| 7 | essary to support the Wildlife GAINS network |
| 8 | and Wildlife GAINS partners; and |
| 9 | (F) coordinate Wildlife GAINS surveillance |
| 10 | results at the headquarters of the eligible orga- |
| 11 | nization. |
| 12 | (e) Database.— |
| 13 | (1) In General.—The Administrator shall |
| 14 | manage, map, and make available on a database on |
| 15 | the Internet all results and information gathered |
| 16 | under this Act. |
| 17 | (2) Requirements.—The database shall— |
| 18 | (A) provide geographic data on wildlife |
| 19 | populations and the movements of the popu- |
| 20 | lations and laboratory test results; and |
| 21 | (B) be available for viewing by any Federal |
| 22 | agency, foreign country, multilateral institution, |
| 23 | organization, or individual. |
| 24 | (f) Training.—The Administrator shall request ac- |
| 25 | credited colleges of veterinary medicine and medicine and |

- 1 other Wildlife GAINS partners to train members of the
- 2 Wildlife GAINS network to—
- 3 (1) monitor important wildlife areas around the
 4 world; and
- 5 (2) test for the presence or arrival of avian in-
- 6 fluenza and other significant pathogens of zoonotic
- 7 concern or of concern to domestic or wild animals.

8 SEC. 6. AUTHORIZATION OF APPROPRIATIONS.

- 9 There is authorized to be appropriated to carry out
- 10 this Act \$10,000,000 for each of fiscal years 2008 through
- 11 2012.

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